

# Notice of Allowability

Application No.

10/563,784

Examiner

Fred M. Teskin

Applicant(s)

MAES ET AL.

Art Unit

1713

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 20060106
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20070925
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**Examiner's Amendment**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claim 4, line 2: "or" has been changed to --and--; and --the group consisting of-- inserted after "from".

Claim 17, final line: "having" has been deleted as extraneous.

**Examiner's Comment**

Authorization for this examiner's amendment was given in a telephone interview with applicants' representative, Mr. Christy, on September 25, 2007.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iwamoto et al is cited merely to show analogous art relating to rubber-modified copolymers having a continuous phase of styrene-acrylonitrile copolymer and a dispersed phase of styrene-butadiene block copolymer rubber (note Table 1-1).

**Reasons for Allowance**

The following is an examiner's statement of reasons for allowance:

Claims 1-22 are allowable over the closest prior art of EP '687.

Applicants' claims recite a mass polymerized rubber-modified monovinylidene aromatic copolymer composition comprising (i) a continuous matrix phase and (ii) a rubber component dispersed as discrete rubber particles in the matrix, the matrix phase comprising a copolymer of a monovinylidene aromatic monomer and an ethylenically unsaturated nitrile monomer and the rubbery component comprising a polybutadiene rubber with a 5 percent solution viscosity in styrene at 25°C of between 15 to 120 cP and a styrene and butadiene block copolymer rubber, wherein the rubber component has a polybutadiene rubber content (PBD<sub>c</sub>) equal to or greater than about 14 weight percent (based on weight of the copolymer composition) and the matrix copolymer has a weight-average molecular weight ( $M_{w \text{ Matrix}}$ ) represented by the formula:  $(M_{w \text{ Matrix}}) \geq 510 - 22*(PBD_c)$ .

EP '687 exemplifies rubber-reinforced styrene-acrylonitrile copolymer resin compositions containing, as the rubbery component, 15 weight parts of a butadiene homopolymer having a solution viscosity within applicants' range and which are characterized by Charpy impact strengths as high as 19 (Table IV, Exp. No. 6), which falls within the range of claim 12. However, claim 12 (as amended) depends from claim 1 and, thus, also requires an ( $M_{w \text{ Matrix}}$ ) parameter that satisfies the recited formula. Such a molecular weight parameter is nowhere mentioned in EP '687. Nor is EP '687 found to teach or adequately suggest the required relationship between matrix copolymer  $M_w$  and polybutadiene rubber content of a rubber-modified monovinylidene aromatic copolymer resin composition.

Art Unit: 1713

Based primarily on the foregoing, claims 1-22 are deemed to define allowable subject matter and passed to issue.


Any comments considered necessary by applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/09-25-07

  
**FRED TESKIN**  
**PRIMARY EXAMINER**  
1713